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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, VAN KIM T

ART UNIT

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2152

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/749,850	Applicant(s) PETROV ET AL.	
	Examiner Van Kim T. Nguyen	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/7/04 and 12/17/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to communications filed on December 30, 2003.

Claims 1-29 are pending in the case.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on September 7, 2004 and December 17, 2007 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code; page 11, para [0031]. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-29, as disclosed, fail to fall within a statutory category of invention. As presented in the specification, para [0032-0087], it would suggest to one of ordinary skill in the

art that all may be reasonably implemented as software routines; therefore, claims 1-29 are rejected as a system of software per se, failing to fall within a statutory category of invention.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

Claim 1 recites a cluster of application servers, an administration service, an MBean Server and a notification service without disclosing the structural cooperative relationships between elements of the claim. Thus it is not clear how data is to be collected and reported for its associated resource via the MBean server or how the notification service distributing the notifications to server nodes of the cluster.

Similarly, claims 2-29 are rejected under the same basis.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-3, 6-10, 14-17, 20-24 and 28-29 are rejected under 35 U.S.C.102(e) as being anticipated by Cundiff, JR. et al. (US 2004/0230973), hereinafter Cundiff.

Regarding claim 1, as shown in Figures 9-12, Cundiff discloses a multi-service monitoring system comprising:

a cluster of application servers 170 communicatively coupled on a network to serve applications over the network to a plurality of clients, each of the application servers comprising a plurality of server nodes 160, 162;

an administration service 165, 167 to generate a plurality of runtime management beans ("MBeans") on each of the server nodes and to associate each of the runtime MBeans with specified server node resources, each of the runtime MBeans collecting and reporting monitoring data for its associated resource via an MBean server 145; and

a notification service 234, 236 to generate notifications in response to certain specified events associated with certain resources of certain MBeans, the notification service distributing the notifications across all, or a subset of, the server nodes of the cluster (Figures 9-12; para 0037-0038).

Regarding claim 2, Cundiff also discloses a monitor service to generate monitor MBeans corresponding to selected runtime MBeans, the monitor MBeans arranged in a hierarchical tree structure, each of the monitor MBeans associated with at least one of the runtime MBeans, each of the monitor MBeans to receive the monitoring data from its associated runtime MBean (Figures 9-12; para 0038).

Regarding claim 3, Cundiff also discloses an administration adapter service 165, 167 include a convenience interface to provide access to one or more of the MBean servers from a remote client (Figures 9-12; para 0034- 0038).

Regarding claim 6, Cundiff also discloses the administration service generates standard runtime MBeans and specific runtime MBeans, the standard runtime MBeans providing one or more predefined standard functions for their associated resources, and the specific MBeans providing one or more resource- specific functions for their associated resources (para 0034, 0043).

Regarding claims 7 and 21, Cundiff also discloses one of the standard functions comprises starting and stopping of the resource (para 0042- 0043).

Regarding claims 8 and 22, Cundiff also discloses one of the standard functions comprises getting and/or setting properties associated with the resource (para 0042- 0043).

Regarding claims 9 and 23, Cundiff also discloses each resource having a specific MBean associated therewith also has a standard MBean associated therewith (para 0043).

Regarding claims 10 and 24, Cundiff also discloses each of the application servers comprises a plurality of server nodes 160, 162 and at least one dispatcher node 170, and wherein the administration service generate runtime MBeans on each of the server nodes and the one or

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more dispatcher nodes and associates each of the runtime MBeans with specified server node and/or dispatcher resources, each of the runtime MBeans collecting and reporting monitoring data for its associated resource via an MBean server (para 0042- 0043).

Regarding claim 14, Cundiff also discloses the notification service and the administration service are Java services implemented within a Java enterprise architecture (para 0034).

Regarding claim 15, Cundiff also discloses a multi-service monitoring system comprising:

a cluster of application servers 170 communicatively coupled on a network to serve applications over the network to a plurality of clients, each of the application servers comprising a plurality of server nodes 160, 162;

an administration service 165, 167 to generate a plurality of runtime management beans ("MBeans") on each of the server nodes and to associate each of the runtime MBeans with specified server node resources, each of the runtime MBeans collecting and reporting monitoring data for its associated resource via an MBean server 145; and

a monitor service (i.e., control service 175) to generate monitor MBeans corresponding to selected runtime MBeans, the monitor MBeans arranged in a hierarchical tree structure, each of the monitor MBeans associated with at least one of the runtime MBeans, each of the monitor MBeans to receive the monitoring data from its associated runtime MBean (Figures 9-12; para 0037-0038).

Regarding claim 16, Cundiff also discloses a notification service to generate notifications in response to certain specified events associated with certain resources of certain MBeans, the notification service distributing the notifications across all, or a subset of, the server nodes of the cluster (Figures 9-12; para 0037-0038).

Regarding claim 17, Cundiff also discloses an administration adapter service 165, 167 include a convenience interface to provide access to one or more of the MBean servers 145 from a remote client.

Regarding claim 20, Cundiff also discloses the administration service generates standard runtime MBeans and specific runtime MBeans, the standard runtime MBeans providing one or more predefined standard functions for their associated resources, and the specific MBeans providing one or more resource- specific functions for their associated resources (para 0034 and 0043).

Regarding claim 28, as shown in Figures 9-12, Cundiff also discloses a system comprising:

application server means comprising a cluster of application servers 170 communicatively coupled on a network to serve applications over the network to a plurality of clients, each of the application servers comprising a plurality of server nodes 160, 162;

administration service means 165, 167 to generate a plurality of runtime management beans ("MBeans") on each of the server nodes and to associate each of the runtime MBeans with

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specified server node resources, each of the runtime MBeans collecting and reporting monitoring data for its associated resource via an MBean server 145; and

notification service means 234, 236 to generate notifications in response to certain specified events associated with certain resources of certain MBeans, the notification service means distributing the notifications across all, or a subset of, the server nodes of the cluster (Figures 9-12; para 0037-0038).

Regarding claim 29, Cundiff also discloses monitor service means (i.e., control service 175) to generate monitor MBeans corresponding to selected runtime MBeans, the monitor MBeans arranged in a hierarchical tree structure, each of the monitor MBeans associated with at least one of the runtime MBeans, each of the monitor MBeans to receive the monitoring data from its associated runtime MBean (Figures 9-12; para 0037-0038).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cundiff, in view of Ismael et al (US 6,061,721), hereinafter Ismael.

Cundiff discloses substantially all the claimed limitations, except for a swing-based graphical user interface ("GUI") coupled to the convenience interface and the hierarchical tree

structure, the swing-based GUI to represent the management functionality of the monitoring architecture to a network administrator or end user.

Ismael teaches beans are reusable software component which can be manipulated visually by GUI builder or Graphical user interface (col. 2: lines 23-36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the well known GUI builder taught by Ismael in the system of Cundiff, in order to manipulate the software commands easier using the virtually builder tools.

10. Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cundiff, in view of Jung et al (US 6,308,208), hereinafter Jung .

Cundiff discloses substantially all the claimed limitations, except a shell command interface comprising a plurality of shell commands for controlling monitor configuration data and monitor resource data.

Jung discloses a shell command interface comprising a plurality of shell commands for controlling monitor configuration data and monitor resource data (Figure 5, col. 7: lines 1-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Jung's cell commands for controlling monitor configuration data and monitor resource data in Cundiff's system, motivated by the desire to enhance the system monitoring.

11. Claims 11-13 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cundiff, in view of Tsun (US 7,093,251).

Regarding claims 11 and 25, Cundiff does not call for reaching a first threshold value.

Tsun teaches it is well known to use threshold for triggering network elements (i.e., threshold normal values, col. 9: lines 10-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tsun's threshold in Cundiff's system in monitoring tasks on a network computer.

Regarding claims 12 and 26, Cundiff-Tsun also teaches the second threshold value representing a critical resource value (i.e., threshold critical value; Tsun, col. 9: lines 10-13).

Regarding claims 13 and 27, Cundiff-Tsun also teaches one of the specified events comprises a resource becoming unavailable (i.e., endpoint pair 22, 24 is unable to establish a connection; Tsun, col. 13: lines 32-36).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Adjusted Monitoring in a Relational Environment, Krissell (US 6,993,453);

Apparatus and Method for Managing Network and Computer Readable Recording Medium thereof, Tsuneya et al (US 6,990,601);

Systems and Methods for Authoring and Executing Operational Policies that Use Event Rates, Hellerstein et al (US 6,792,456);

Combining a Meta Data File and Java Source Code to Dynamically Create Java Classes and JavaBeans, Wigger (US 6,427,228); and

Arrangement, a System and a Method Relating to Management Communication, Wilson (US 2002/0029298).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN KIM T. NGUYEN whose telephone number is (571)272-3073. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Van Kim T. Nguyen
Examiner
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